



UNITED STATES PATENT AND TRADEMARK OFFICE

11A

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,867	03/10/2004	Po-Cheng Chen	250122-1350	2229
24504	7590	08/16/2006	EXAMINER LEWIS, MONICA	
THOMAS, KAYDEN, HORSTEMEYER & RISLEY, LLP 100 GALLERIA PARKWAY, NW STE 1750 ATLANTA, GA 30339-5948			ART UNIT 2822	

DATE MAILED: 08/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/797,867	Applicant(s) CHEN ET AL.	
	Examiner Monica Lewis	Art Unit 2822	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-22 is/are pending in the application.
- 4a) Of the above claim(s) 14-21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12,13 and 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to the response filed May 27, 2006.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 12 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Takagi et al. (U.S. Patent No. 6,376,986).

In regards to claim 12, Takagi et al. ("Takagi") discloses the following:

a) a front substrate (11) (For Example: See Figure 14);

a) a rear substrate (21) (For Example: See Figure 14); and

b) at least one set of alignment marks is installed on the front and rear substrates, the set of alignment marks comprise a first and second pattern installed on the predetermined assembling position of the first and second substrate respectively, the second pattern comprises at least a hexagonal honeycomb pattern (29) formed with rib barriers, a line segment of the first pattern (Xq and Yq) is parallel to at least one side of the hexagonal honeycomb pattern with a predetermined distance there between, and the first and second patterns are used to align between the front and rear substrates, when assembling a PDP (For Example: See Figure 14).

In regards to claim 13, Takagi discloses the following:

a) the first pattern comprises a plurality of parallel line segments (For Example: See Figure 14).

Art Unit: 2822

4. Claims 12 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Kuni et al. (Japanese Publication No. 2000-011894).

In regards to claim 12, Kuni et al. ("Kuni") discloses the following:

- a) a front substrate (41) (For Example: See Figure 1);
- a) a rear substrate (51) (For Example: See Figure 1); and
- b) at least one set of alignment marks is installed on the front and rear substrates, the set of alignment marks comprise a first and second pattern installed on the predetermined assembling position of the first and second substrate respectively, the second pattern comprises at least a hexagonal honeycomb pattern formed with rib barriers, a line segment of the first pattern (43) is parallel to at least one side of the hexagonal honeycomb pattern with a predetermined distance there between, and the first and second patterns are used to align between the front and rear substrates, when assembling a PDP (For Example: See Figure 1).

In regards to claim 13, Kuni discloses the following:

- a) the first pattern comprises a plurality of parallel line segments (For Example: See Figure 14).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takagi et al. (U.S. Patent No. 6,376,986) in view of Boo et al. (Korean Publication No. 2002019353).

In regards to claim 22, Takagi fails to disclose the following:

- a) the first pattern installed on the front substrate comprises non-transparent bus electrode material or black matrix material.

Art Unit: 2822

However, Boo et al. ("Boo") discloses a semiconductor device that has a first pattern installed on the front substrate (10) comprises non-transparent bus electrode material (13) or black matrix material (For Example: See Abstract). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the semiconductor of Takagi to include a first pattern installed on the front substrate that comprises a non-transparent bus electrode material or black matrix material as disclosed in Boo because it aids in providing a discharge sustain function (For Example: See Abstract).

Additionally, since Takagi and Boo are both from the same field of endeavor, the purpose disclosed by Boo would have been recognized in the pertinent art of Takagi.

7. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kuni et al. (Japanese Publication No. 2000-011894) in view of Boo et al. (Korean Publication No. 2002019353).

In regards to claim 22, Takagi fails to disclose the following:

a) the first pattern installed on the front substrate comprises non-transparent bus electrode material or black matrix material.

However, Kuni discloses a semiconductor device that has a first pattern installed on the front substrate (10) comprises non-transparent bus electrode material (13) or black matrix material (For Example: See Abstract). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the semiconductor of Kuni to include a first pattern installed on the front substrate that comprises a non-transparent bus electrode material or black matrix material as disclosed in Boo because it aids in providing a discharge sustain function (For Example: See Abstract).

Art Unit: 2822

Additionally, since Kuni and Boo are both from the same field of endeavor, the purpose disclosed by Boo would have been recognized in the pertinent art of Kuni.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monica Lewis whose telephone number is 571-272-1838. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zandra Smith can be reached on 571-272-2429. The fax phone number for the organization where this application or proceeding is assigned is 571-272-8300 for regular and after final communications.

ML

August 2, 2006

A handwritten signature in black ink, appearing to be 'C. A. Smith', is located in the lower right quadrant of the page.